

WHAT IS CLAIMED IS:

1. A method of purifying water comprising the steps of:
 - causing contaminated waste water to flow through an inlet into an elongated, closed water channel;
 - nitrifying, in a treatment zone adjacent to the inlet, the waste water by aerobic bacteria; and
 - denitrifying, the waste water with anaerobic bacteria in a treatment zone adjacent an outlet of the water channel;

thereby producing purified waste water in which the content of a nitrate has been reduced.
2. A water purifying apparatus comprising:
 - an elongated, closed water channel having an inlet for contaminated waste water, and an outlet for purified waste water;
 - the channel comprising an aerobic bacteria treatment zone adjacent the waste water inlet, and an anaerobic bacteria treatment zone adjacent the waste water outlet.
3. A water purifying apparatus according to claim 2, wherein said elongated, closed water channel is formed by connecting a series of tubes into a zigzag-shape.
4. A water purifying apparatus according to claim 2, wherein said elongated, closed water channel includes a plurality of J-shaped cylindrical tubes which are arranged with upper and lower end portions alternately connected to each other so as to form a zigzag shaped water channel.
5. A water purifying apparatus according to claim 2, wherein said elongated, closed water channel includes a plurality of U-shaped cylindrical tubes which are arranged

with upper and lower end portions alternately connected to each other so as to form a zigzag shaped water channel.